

Status of All Claims in the Application:

---

AI  
1. (Canceled)

2. (Currently Amended) The disk drive of claim [[1]] 81 wherein the storage disk includes a first side region[[,]] and a spaced apart second side region, ~~and a the~~ body region ~~that is~~ being positioned between the side regions, the side regions being asymmetrical relative to the body region.

3. (Canceled)

4. (Original) The disk drive of claim 2 wherein the first side region includes a plurality of servo sectors, and the second side region does not include any servo sectors.

5. (Currently Amended) The disk drive of claim 2 wherein only one of the side regions ~~the first side region~~ includes [[a]] ~~magnetic layer, and the second side region does not include a~~ the data storage layer.

6. (Original) The disk drive of claim 2 wherein the first side region includes a first layer and the second side region includes a second layer, the first layer and the second layer being substantially equidistant from the body region, wherein the first layer is formed from a material having a first composition, and the second layer is formed from material having a second composition that is different from the first composition.

7. (Original) The disk drive of claim 2 wherein the first side region has a mass that is different than a mass of the second side region.

8. (Withdrawn) The disk drive of claim 2 wherein the first side region has a thickness that is different than a thickness of the second side region.

9. (Withdrawn) The disk drive of claim 2 wherein the first side region has a density that is different than a density of the second side region.

10. (Original) The disk drive of claim 2 wherein the second side region includes a stiffener that increases the rigidity of the storage disk.

11. (Withdrawn) The disk drive of claim 10 wherein the stiffener extends substantially radially from near an inner diameter of the storage disk.

12. (Withdrawn) The disk drive of claim 11 wherein the second side region includes an outer flat section and the stiffener is raised at least approximately 0.001 millimeters above the outer flat section.

13. (Canceled)

14. (Original) The disk drive of claim 10 wherein the stiffener redirects fluid within the drive housing during rotation of the storage disk.

15. (Original) The disk drive of claim 10 wherein the stiffener is substantially arc-shaped.

16. (Original) The disk drive of claim 2 wherein the storage disk includes a plurality of stiffeners that increase the rigidity of the storage disk.

17. (Withdrawn) The disk drive of claim 16 wherein the second side region includes an outer flat section, and wherein at least one of the stiffeners is positioned below the outer flat section.

18. (Original) The disk drive of claim 16 wherein the second side region includes an outer flat section and wherein each of the stiffeners is raised above the outer flat region.

PS  
cm  
19. (Withdrawn) The disk drive of claim 2 wherein the second side region includes a damping layer that dampens vibration of the storage disk during rotation, and wherein the first side region does not include a damping layer.

20. (Withdrawn) The disk drive of claim 19 wherein the damping layer includes a viscoelastic material.

21. (Withdrawn) The disk drive of claim 19 wherein the damping layer includes a material that is applied with an adhesive.

22. (Withdrawn) The disk drive of claim 19 wherein the second side region includes a constraining layer that constrains the damping layer, wherein the damping layer is positioned between the constraining layer and the body region.

23. (Original) The disk drive of claim 2 wherein the second side region includes an outer flat section and a plurality of projections that extend above the outer flat section.

24. (Original) The disk drive of claim 23 wherein at least one of the projections is raised above the outer flat region by at least approximately 0.001 millimeters.

25. (Withdrawn) The disk drive of claim 2 wherein the second side region includes a supplemental layer that balances the storage disk.

26. (Withdrawn) The disk drive of claim 25 wherein the supplemental layer has a non-uniform thickness.

27. (Withdrawn) The disk drive of claim 2 wherein the second side region includes an adsorption layer that adsorbs impurities within the drive housing.

28. (Withdrawn) The disk drive of claim 27 wherein the adsorption layer includes a chemical adsorbent.

29. (Withdrawn) The disk drive of claim 27 wherein the second side region includes a diffusion layer that is positioned adjacent to the adsorption layer, the diffusion layer being adapted to filter out unwanted particles within the drive housing.

30. (Withdrawn) The disk drive of claim 1 wherein the storage disk includes a body region having a first body side and an opposed second body side, wherein one of the body sides is exposed.

31. (Currently Amended) A storage disk for a disk drive, the storage disk comprising:

a body region;

a first side region secured to the body region; and

a substantially opposed second side region secured to the body region;

wherein only one of the side regions includes a data storage layer, and wherein the body region and the side regions are formed as a unitary structure, and the side regions are asymmetrical relative to the body region.

32. (Canceled)

33. (Original) The storage disk of claim 31 wherein the first side region includes a plurality of servo sectors, and the second side region does not include any servo sectors.

34. (Canceled)

35. (Original) The storage disk of claim 31 wherein the first side region includes a first layer and the second side region includes a second layer, the first layer

AI  
cont

and the second layer being substantially equidistant from the body region, wherein the first layer is formed from a material having a first composition, and the second layer is formed from material having a second composition that is different from the first composition.

36. (Original) The storage disk of claim 31 wherein the first side region has a mass that is different than a mass of the second side region.

37. (Withdrawn) The storage disk of claim 31 wherein the first side region has a thickness that is different than a thickness of the second side region.

38. (Withdrawn) The storage disk of claim 31 wherein the first side region has a density that is different than a density of the second side region.

39. (Original) The storage disk of claim 31 wherein the second side region includes a stiffener that increases the rigidity of the storage disk.

40. (Original) The storage disk of claim 39 wherein the second side region includes an outer flat section, and wherein the stiffener extends away from the outer flat section.

41. (Original) The storage disk of claim 40 wherein the stiffener extends away from the outer flat section at least approximately 0.001 millimeters.

42. (Withdrawn) The storage disk of claim 39 wherein the stiffener extends substantially radially from an inner diameter of the second side region.

43. (Withdrawn) The storage disk of claim 39 wherein the stiffener is tubular shaped.

44. (Original) The storage disk of claim 39 wherein the stiffener redirects fluid

during rotation of the storage disk.

45. (Original) The storage disk of claim 39 wherein the stiffener is substantially arc-shaped.

46. (Original) The storage disk of claim 31 wherein the second side region includes a plurality of spaced apart stiffeners that increase the rigidity of the second side region.

47. (Withdrawn) The storage disk of claim 46 wherein the second side region includes an outer flat section, and wherein at least one of the stiffeners is positioned below the outer flat section.

48. (Original) The storage disk of claim 46 wherein the second side region includes an outer flat section and each of the stiffeners extends away from the outer flat section.

49. (Withdrawn) The storage disk of claim 31 wherein the second side region includes a damping layer that dampens vibration of the storage disk, and wherein the first side region does not include a damping layer.

50. (Withdrawn) The storage disk of claim 49 wherein the damping layer includes a viscoelastic material.

51. (Withdrawn) The storage disk of claim 49 wherein the second side region includes a constraining layer that constrains the damping layer, wherein the damping layer is positioned between the constraining layer and the body region.

52. (Original) The storage disk of claim 31 wherein the second side region includes an outer flat region and a plurality of projections that extend away from the outer flat region.

53. (Original) The storage disk of claim 52 wherein at least one of the projections extends away from the outer flat region at least approximately 0.001 millimeters.

54. (Withdrawn) The storage disk of claim 31 wherein the second side region includes a supplemental layer that balances the storage disk during rotation of the storage disk.

55. (Withdrawn) The storage disk of claim 54 wherein the supplemental layer has a non-uniform thickness.

56. (Withdrawn) The storage disk of claim 31 wherein the second side region includes an adsorption layer that adsorbs impurities.

57. (Withdrawn) The storage disk of claim 56 wherein the adsorption layer includes a chemical adsorbent.

58. (Withdrawn) The storage disk of claim 56 wherein the second side region includes a diffusion layer that is positioned adjacent to the adsorption layer, the diffusion layer being adapted to filter out unwanted particles.

59. (Original) The storage disk of claim 31 wherein the first side region has a first shape and the second side region has a second shape, and wherein the first shape is different than the second shape.

60. (Original) A disk drive including a drive housing and the storage disk of claim 31.

61-80. (Canceled)

81. (New) A disk drive comprising:

a drive housing; and

an asymmetrical storage disk that is rotatably coupled to the drive housing, the storage disk having a body region and only one data storage layer that is fixedly coupled to the body region during non-rotation of the storage disk.

82. (New) The disk drive of claim 2 wherein the side regions are not spaced apart from the body region.

83. (New) The disk drive of claim 7 wherein the mass of the second side region differs from the mass of the first side region by at least approximately 0.0001 percent.

84. (New) The disk drive of claim 7 wherein the mass of the second side region differs from the mass of the first side region by at least approximately 0.01 percent.

85. (New) The disk drive of claim 10 wherein the storage disk includes an inner diameter and an outer diameter, and wherein the stiffener extends substantially between the inner diameter and the outer diameter.

86. (New) The disk drive of claim 10 wherein the stiffener at least partly forms an outer ridged section that cantilevers in a direction away from the body region.

87. (New) The disk drive of claim 86 wherein the outer ridged section has a top surface that is fully exposed within the drive housing.

88. (New) The disk drive of claim 86 wherein the second side region has an outer flat section, and wherein the outer ridged section extends at least approximately 10 microns away from the outer flat section.



89. (New) The disk drive of claim 16 wherein the plurality of stiffeners are non-concentric.

90. (New) The storage disk of claim 31 wherein the side regions are not spaced apart from the body region.

91. (New) The disk drive of claim 36 wherein the mass of the second side region differs from the mass of the first side region by at least approximately 0.0001 percent.

92. (New) The disk drive of claim 36 wherein the mass of the second side region differs from the mass of the first side region by at least approximately 0.01 percent.

93. (New) The storage disk of claim 39 wherein the storage disk includes an inner diameter and an outer diameter, and wherein the stiffener extends substantially between the inner diameter and the outer diameter.

94. (New) The storage disk of claim 39 wherein the stiffener at least partly forms an outer ridged section that cantilevers in a direction away from the body region.

95. (New) The storage disk of claim 94 wherein the outer ridged section has a top surface that is fully exposed within the drive housing.

96. (New) The storage disk of claim 94 wherein the second side region has an outer flat section, and wherein the outer ridged section extends at least approximately 10 microns away from the outer flat section.

97. (New) The storage disk of claim 46 wherein the plurality of stiffeners are non-concentric.

98. (New) A method for making a disk drive, the method comprising the steps of:

providing a drive housing; and

rotatably coupling a storage disk to the drive housing, the storage disk having a first side region and a second side region that are fixedly coupled to a body region so that the side regions are not spaced apart from the body region and only one of the side regions includes a data storage layer.

99. (New) The method of claim 98 wherein the step of rotatably coupling includes positioning the body region between the first side region and the second side region.

100. (New) The method of claim 98 wherein the step of rotatably coupling includes positioning a first layer within the first side region and a second layer within the second side region so that the first layer and the second layer are substantially equidistant from the body region, forming the first layer from a first material, and forming the second layer from a second material that is different from the first material.

101. (New) The method of claim 98 wherein the step of rotatably coupling includes providing the first side region having a mass that is different than a mass of the second side region.

102. (New) The method of claim 98 wherein the step of rotatably coupling includes positioning a raised stiffener within the second side region.

103. (New) The method of claim 102 wherein the step of positioning a raised stiffener includes positioning the stiffener to cantilever in a direction away from the body region.

104. (New) The method of claim 102 wherein the raised stiffener is substantially arc-shaped.

105. (New) The method of claim 102 wherein the raised stiffener has an outer  
ridged section that extends at least approximately 10 microns away from an outer flat  
section of the second side region.

106. (New) A disk drive comprising:

a drive housing; and

an asymmetrical storage disk that is rotatably coupled to the drive housing, the storage disk having a body region, a first side region that includes a data storage surface, and a second side region that includes an arc-shaped stiffener that cantilevers in a direction away from the body region, the stiffener being positioned opposite the data storage surface of the first side region.

107. (New) The disk drive of claim 106 wherein the stiffener extends from near an inner diameter to an outer diameter of the storage disk.

---